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A CASE OF ACUTE OSTEO-ARTHRITIS INVOLVING THE WHOLE CERVICAL REGION OF THE SPINE, IN A WOMAN NEARLY SIXTY YEARS OF AGE, WITH RECOVERY.

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CASES of acute osteo-arthritis in which the spine is involved are not common, and it is for this reason that the following case is reported.

The patient, a woman fifty-eight years of age, by occupation a nurse, had always been well and actively engaged in her work until the present sickness. Her family history is good, and she has never had the least trouble from rheumatism.

In July, 1893, she was caught in a thunder-shower, and her clothing wet through. The next morning she complained of pain in the neck, with some tenderness in the upper part of the chest. There was no cough or expectoration. The pain in the neck increased in severity very rapidly, until the slightest motion caused the most intense suffering, and because of this the patient was admitted to the Good Samaritan Hospital. The patient entered the hospital in the service of Dr. Coolidge, and it was through his kindness that I was enabled to see her.

At the time of the first examination the patient was evidently suffering a good deal. The head was held a little to one side, the chin to the left, the shoulders drawn up, and all motions were most carefully guarded by muscular contraction. Any attempt at motion caused great pain. None of the other joints were in



the least involved; and aside from this local condition the patient seemed well.

For the first week or two the patient was kept quiet in bed, and the various rheumatic remedies freely given with very little if any effect. After this a Thomas collar was applied for more complete fixation, and following this light weight extension was used. These gave some relief, but neither could be used continuously because of the nervousness of the patient; so that the two appliances were used alternately, each being worn for a few hours.

In three or four weeks after the beginning of the attack a swelling appeared in the right side of the neck. This was about the size of a small lemon, and was apparently connected with the spine. At the same time numbness of the left arm was noticed, with some impairment of motion, and this condition continued and increased until the arm was almost entirely helpless. The right arm and both legs also became involved, never in as marked a degree as the left arm, but enough to make motion in bed, unassisted, impossible. At one time there was some difficulty in swallowing, and for some time the breathing was almost entirely diaphragmatic.

The patient's condition remained about the same for two months, after which there was a slow but steady improvement, so that at the end of the third month she was able to sit up for a short time each day, and in December, five months from the onset of the trouble, she was able to move about with but little assistance, and was taken home. The paralytic symptoms referred to the right arm and the legs had by this time practically disappeared, but the left arm was still very helpless. The swelling in the neck was practically the same as when first noticed.

The patient was not again seen until thirteen months

later, during which time, aside from the Thomas collar no special treatment had been carried out. At the time of this examination the improvement in the patient's general condition was most marked. She moved about with perfect ease, and, aside from the stiffness of the neck and some impairment in the use of the left arm, she seemed well. Extension of the neck was entirely restricted, so that in order to raise the chin the whole body was bent backward. Rotation was also entirely restricted, while flexion of the neck was nearly normal, it being possible to lower the chin to the chest. On each side of the neck, over the transverse processes, was very distinct thickening, apparently bony in character.

In the left arm all motions were limited, especially those in which the shoulder muscles were used. The fingers were flexed, apparently due to contraction of the palmar fascia and the flexor tendons. The sensation of the arm and hand was normal.

At the present time the patient's condition is practically the same as at the time of this last note. She is able to be about at her work, but there has been no change in the condition of the neck or the arm.

In commenting upon such a case the chief interest lies in the diagnosis. Certain conditions can be eliminated at once or in a short time while with others positive differentiation is difficult or impossible. The fact that other joints are not involved, together with the effect of the salicylates, makes it easy to rule out acute rheumatism, while the history of the onset, this condition developing so rapidly, makes the chronic rheumatisms improbable. The simple "crick" is rarely so severe and is well in a few days. Caries of the cervical spine developing after middle life is very rare; so that, while this may not be put aside entirely, it is improbable. The chief difficulty lies in differen-

tiating osteo-arthritis from malignant disease ; and this at times is impossible until after the lapse of considerable time. In the present case the positive diagnosis was not made until the improvement commenced. The history of the onset, if this can be depended upon, is at least suggestive ; but the character of the pain is probably of as much importance as any one symptom. In malignant disease the pain is, as a rule, much more severe and more constant than in the bone inflammations, and fixation or drugs (aside from morphia) have no effect upon it.

The treatment of osteo-arthritis of the spine is largely palliative. Absolute quiet for the affected part is of first importance and for this purpose splints, bandages and various forms of apparatus are of use. In certain portions of the body extension can be employed to advantage to control the muscular spasm. Local heat is also of benefit. Drugs, aside from making the patient more comfortable, are of little use.